



"We bring people to space — We bring space to people"

Chandra Shuttle crew to visit Marshall Thursday

Members of the STS-93 Space Shuttle crew, who launched NASA's Chandra X-ray Observatory in July, will visit Marshall Thursday.

The crew, led by NASA's first female commander, Eileen M. Collins, will speak about the mission from 12:30-1:30 p.m. in Morris Auditorium. All employees are invited to attend. The crew also will present "Silver Snoopy" awards to employees in recognition of individual contributions to the success of the Space Shuttle program.

The STS-93 mission lifted off on July 23, carrying the world's most powerful X-ray telescope, Chandra, a project managed by the Marshall Center. Chandra was also the heaviest payload ever carried into space by a Shuttle. The telescope already is sending back images which astronomers are hailing as "fantastic" and of great benefit in understanding the mysteries of exploding stars, black holes and other celestial phenomena.

STS-93 crew members, in addition to Collins, are pilot Jeffery S. Ashby, and mission specialists Catherine "Cady" Coleman, Steven A. Hawley and Michel Tognini.



Photo by Doug Stoffer, NASA/Marshall Space Flight Center

This won't hurt a bit

Jim Carter, deputy director of the Center Operations Directorate, braves an oversized needle to get a flu shot Oct. 5. The Medical Center set up three dates this year for civil service employees and contractors to receive flu shots. The last date scheduled for flu shots is Oct. 20 from 1:30-3:30 p.m. in Bldg. 4249. Employees are reminded to wear short sleeves.

NASA Administrator Goldin to visit Marshall Friday

NASA Administrator Dan Goldin will visit Marshall on Friday, to salute team members of the successful Chandra X-ray Observatory project — an effort managed by Marshall.

Remarks and awards presentations will be held from 9-10:30 a.m. in Morris Auditorium.

A pizza party is being held from 11:30-1:30 p.m. at the Picnic Pavilion near Bldg. 4752. ABSTRACT jazz band will perform. In case of rain, the pizza party will be inside Bldg. 4752.

All employees and contractors are invited to attend both events.

Stephenson named head of Mars Climate Orbiter Investigation Board

NASA Administrator Dan Goldin last week named Marshall Center Director Art Stephenson to be the head of the Mars Climate Orbiter Mission Failure Investigation Board.

The investigation board will look independently into all aspects of the failure of the mission, which was lost Sept. 23 as the spacecraft was entering orbit around Mars. The board will report its initial findings to NASA Headquarters by Nov. 3. Other board members are to be named.

"As a proven private sector executive and now as the director of a NASA Center, Art Stephenson has all the skills necessary to lead a failure review team comprised of the nation's best and brightest. I have asked him to look at the implications of the loss of the Mars Climate Orbiter as it relates to all NASA missions," Goldin said.

"The team hopes to verify whether the cause of this failure was a result of an inadequacy in our interplanetary navigation systems. Our systems should be robust enough to detect human and machine-made errors. The findings may lead to a fundamental change in the design of our future interplanetary missions," Goldin added.

Preliminary findings by an internal peer review at NASA's Jet Propulsion Laboratory in Pasadena, Calif.,



Marshall Center Director Art Stephenson

"Safety First, Last, Always!"
— *Safety slogan submitted by Carter Kelly, Raytheon*

See Mars on page 5

Language a powerful tool

Communicating with, about people with disabilities

Positive language empowers. When writing or speaking about people with disabilities, it is important to put the person first.

Group designations such as “the blind,” “the deaf,” “the disabled,” “handicapped man confined to a wheelchair,” or “girl stricken with cerebral palsy” help shape incorrect perceptions of people with disabilities.

By working together to create positive attitudes toward people with disabilities, we can create a better society — and that is a positive step for everyone. Negative attitudes are often the greatest barrier for people with disabilities to overcome.

Even the word “handicap” itself is considered insulting by some — and should be avoided. “Handicap” is derived from “cap in hand,” a phrase associated with beggars. Be sensitive when choosing words.

Grouping individuals together puts the focus on the disability, not on the individual. It is inappropriate because they do not reflect the individuality, equality or dignity of people with disabilities. The phrases in the box are positive and negative examples. Note that the positive phrases put the person first.

AFFIRMATIVE PHRASES

person with mental retardation
person who is blind, person who is visually impaired
person with a disability
person who is deaf, person who is hard of hearing
person who has multiple sclerosis
person with cerebral palsy
person with epilepsy, person with seizure disorder
person who uses a wheelchair
person who has muscular dystrophy
physically disabled
person without a disability

unable to speak, uses synthetic speech
seizure

NEGATIVE PHRASES

retarded, mentally defective
the blind
the disabled, handicapped
suffers a hearing loss, the deaf
afflicted by MS
CP victim
epileptic
confined or restricted to a wheelchair
stricken by MD
crippled, lame, deformed
normal person (implies that the person with a disability isn't normal)
dumb, mute
fit

‘Windmills’ training focuses on attitudes regarding employees with disabilities

The Equal Opportunity Office is sponsoring the “Windmills” Attitudinal training program Thursday, in Morris Auditorium. There will be two sessions: 8-10 a.m. and 2-4 p.m. A training form 59 is not required; however, a training roster will be available at the auditorium entrance.

The training is recommended for all supervisors and managers, and will be beneficial for all employees. The curriculum consists of several modules that use partici-

pation and discovery as learning vehicles.

Through this process, individuals are able to recognize their own perception of persons with disabilities, where these perceptions originated, and how they affect their behavior in the workplace.

The training focuses on attitudes and human factor, but also addresses issues including legal requirements and accommodations.



Oct. 4 - Nov. 12

Make your pledge on the Web

Combined Federal Campaign (CFC) Chairperson Bruce Askins looks on as Center Director Art Stephenson makes an electronic donation to CFC. As a federal employee, payroll deduction is the best way to give to CFC. This can be done through the online pledge form located on the CFC '99 Web site: <http://inside.msfc.nasa.gov/CFC99/> Should anyone feel uncomfortable pledging using the Web form, the paper form method is still available. However, Askins said the Web site is the best way to get your CFC pledge recorded quickly and accurately.



Photo by Dennis Olive, NASA/Marshall Space Flight Center

New Chandra images reveal 'shocking' details of superstar's activity

New images of the mysterious superstar Eta Carinae by the Marshall-managed Chandra X-ray Observatory reveal a surprising hot inner core — creating more questions than answers for astronomers.

The new X-ray observation shows three distinct structures: an outer, horseshoe shaped ring about 2 light-years in diameter, a hot inner core about 3 light-months in diameter, and a hot central source less than a light-month in diameter which may contain the superstar. In one month, light travels a distance of approximately 489 billion miles (about 788 billion kilometers).

All three structures are thought to represent shock waves produced by matter rushing away from the superstar at supersonic speeds. The temperature of the shock-heated gas ranges from 60 million degrees Kelvin in the central regions to 3 million degrees K on the outer structure.

An earlier image of Eta Carinae by the Hubble Space Telescope revealed two spectacular bubbles of gas expanding in opposite directions away from a central bright region at speeds in excess of a million miles per hour. The inner region visible in the Chandra image has never been resolved before, and appears to be associated with a central disk of high velocity gas rushing out at much higher speeds perpendicular to the bipolar optical nebula.

"It is not what I expected," said Chandra researcher Dr. Fred Seward of the Harvard-Smithsonian Center for Astrophysics in Cambridge, Mass. "I expected to see a strong point source with a little diffuse emission cloud around it. Instead, we see just the opposite — a bright cloud of diffuse emission, and much less

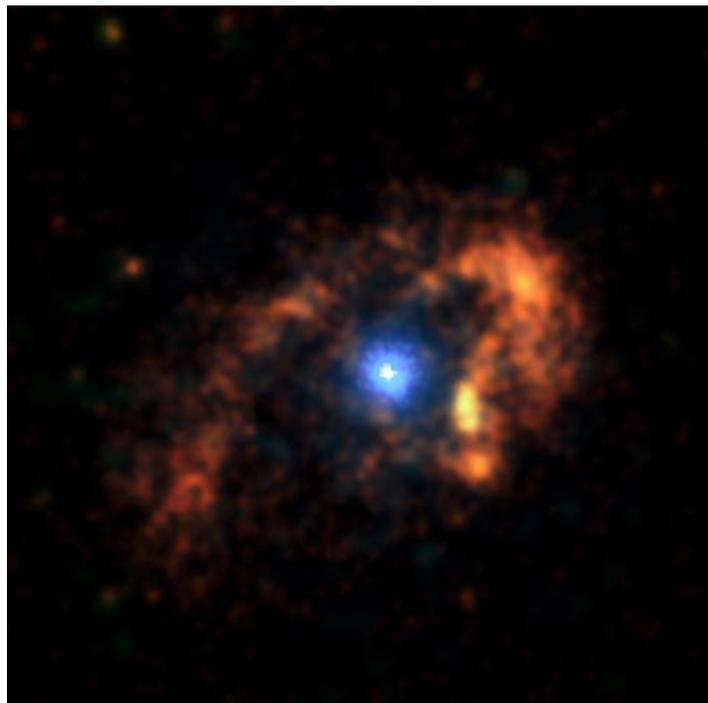


Photo by NASA/CXC/SAO

Recent image of the mysterious superstar Eta Carinae by NASA's Chandra X-ray Observatory.

radiation from the center."

"The Chandra image poses a problem for one of the currently most favored theories for the X-ray emission from the central region of Eta Carinae," agreed Professor Kris Davidson of the University of Minnesota in Minneapolis. "Namely that it is due to the collision of shells of material thrown off by two stars circling one another. In such a scenario, you would expect to see a much stronger point source."

To follow Chandra's progress, visit the Chandra site at: <http://chandra.nasa.gov> and <http://chandra.harvard.edu>

Marshall recognized by NASA for partnering with small businesses

by Marianne Higgins

The Marshall Center has been recognized by NASA Headquarters for outstanding contributions and innovative approaches to partnering with small businesses, women-owned small businesses and small disadvantaged businesses.

Each year, the space agency challenges each NASA field center to allocate a certain percentage of its budget to contracting with such contractors. During fiscal year 1998, the Marshall Center surpassed the goals in each classification of businesses.

The space agency's goals apply to how money is allocated to both prime contractors and subcontractors.

"We have a very aggressive subcontracting program here at Marshall, and that's what helped this Center exceed NASA's goals," said Stan McCall, an industry assistance officer in the Office of Small and Disadvantaged Business Utilization. "We work together with our prime contractor partners to help them share their subcontracting dollars with small, disadvantaged and women-owned firms."

Congress mandates that NASA, as a federal agency, spend at least 8 percent of its contracting dollars with minority businesses. In 1998, Marshall spent 10 percent overall, helping the space agency reach its goal.

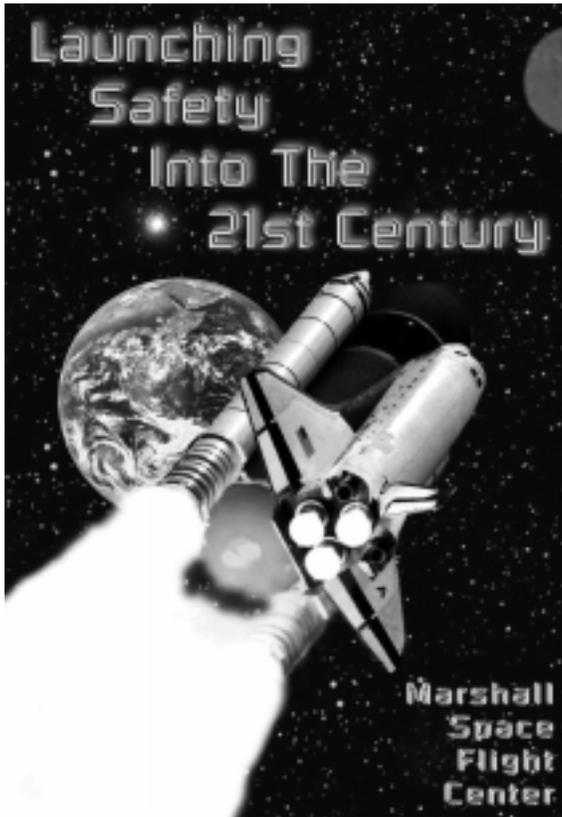
"With Marshall's help, NASA can

serve as a model for other government agencies," McCall said.

David Brock, also an industry assistance officer at Marshall, received the Center's recognition plaque at a ceremony in Washington, D.C. "I want to thank all the offices at Marshall, because this recognition is for them. Our Center understands the need to work with the small and minority business community, and it is nice to be able to show them how much they are appreciated," Brock said.

Marshall's recognition came during Minority Enterprise Development Week, held each September.

The writer, a contractor employed by ASRI, supports the Media Relations Department.



Oct. 20

Marshall stands down for safety

Marshall's Safety Day activities on Oct. 20 will kick off at 8:30 a.m. with a program in Morris Auditorium that will feature writer, photographer and motivational speaker Brian Shul.

Shul, a former U.S. Air Force pilot who was shot down and badly burned in Vietnam, will share his story of determination after the near-fatal crash. Nine years after he was told he would never fly again, he passed an astronaut-type physical during entry into SR-71 training.

Events that follow the kickoff include a Safety and Health Fair from 10 a.m.-2 p.m. at Bldg. 4752. Employees may receive five-minute massages at a cost of \$2. Lunch will be held at the Picnic Pavilion from 11 a.m.-1 p.m. Events at the pavilion include food prepared by Chick-fil-A and Safety Excellence Awards being presented at noon. Astronauts will be visiting with employees, door prizes will be given away and entertainment will be provided. The Volunteer Protection Programs presentation will be held in Morris Auditorium from 2:30-3 p.m.

Astronauts also are scheduled to participate in organizational safety focus meetings from 1-2:30 p.m. in different locations throughout the Center. Organizations should use time periods between scheduled events for safety focus activities, as appropriate.

Ideas for safety focus activities

- ◆ Develop safety goals for your organization.
- ◆ Think of a short safety slogan. These slogans will be displayed on marquees.
- ◆ Update the list of hazardous material data sheet for products used in your area.
- ◆ Have an office/shop/lab cleanup day. A clean workplace is a safer workplace.
- ◆ Schedule a safety film to be shown on Marshall closed circuit television.
- ◆ Have a safety presentation on some subject of interest to your organization.
- ◆ Conduct walk around to meet with employees one-on-one.
- ◆ Review and practice Marshall Emergency Evacuation Plans.
- ◆ Check safety signs, posters, decals and tags to ensure they are current.
- ◆ Conduct team safety inspections on personal automobiles.
- ◆ Check personnel protective equipment and replace/repair as required.

Safety Day bus schedule

Buses and vans will be running from 8 a.m.-to 3:30 p.m. to take employees to and from the Safety Day activities at the picnic area. It will take about 15 minutes to complete a loop.

Bus / Van Routes

<u>Bus #1</u> 4200	<u>Bus #2</u> 4203 S. Loop	<u>Bus #3</u> 4487 main door 4610 new part 4663 main door
<u>Van #1</u> 4666 main door	<u>Van #2</u> 4471 east end 4481 west end 4493 main door	<u>Van #3</u> 4250 main door 4353 4312 4207 north side

Safety Day Vendors

Well Safe, Inc.
3M Corporation
Grainger
VWR Scientific Products
M-DI
Kappler U.S.A.
Koorsen Protection Services
Huntsville Police Department
Army Aviation & Missile Command
Allied Supply Co., Inc.
Solid Waste Disposal Authority
Wyatt Safety Supply Co., Inc.
Tricon Environmental
Craig Edwards
Brian Shul, autograph & sell books
Chick-fil-A
Junior Davis & Associates
Systems Safety Society
Air Quality Technologies
Millennium Company
Technical Micronics Control, Inc.
Celco Safety, Inc.
Dynerics Safety
Devenish & Associates
Elk River, Inc.
Mother's Against Drunk Drivers
American Red Cross

Marshall Center contractor exhibitors include:

VPP
Marshall Activities Center
Bill Carter, Massage Therapist
The Boeing Company
Lockheed Martin Eng. & Science
HEMSI
AJT, Associates

Senior Leadership Conference focuses on values

While in Nashville, Tenn., for a retreat in September, Marshall's senior management team admitted that progress is being made on the way to living Marshall's values, but that both managers and employees still have a long way to go.

The first in a series of Senior Leadership Conferences focused on improving teamwork and developing action plans for integrating Marshall's five values. Future conferences on team building, leadership, building partnerships, and alliances are being planned for senior management and other organizational teams.

At the retreat, the managers divided into teams and discussed the current state of each of the five values: People, Customers, Excellence, Teamwork and Innovation. Each group was charged with developing an action plan that would positively impact the integration of the values into the Marshall culture.

Participants discussed the need for those values to become the basis for decision-making at all levels, with the long-term success of the Center as the primary objective. Additionally, the values are linked together, and one particular value cannot be emphasized to the extent that it overshadows the others or compromises the viability of the Center as a whole.

"The focus was on the Center values and how we can better incorporate all the values into our decision making and everyday work," said Center Deputy Director Carolyn Griner.



The managers broke into teams to explore improving teamwork and to make action plans.

"We developed a better understanding of the challenge this presents and also the tremendous opportunity it affords to improve the quality of our products and our

lives as Marshall team members. We still have a lot of work to do to live our values every day, and I encourage all employees to discuss this as well, and take positive action for improvement."

The Marshall managers also participated in a high-energy simulation designed to focus on teamwork and improving work processes. The simulation allowed the participants to experience first-hand the frustration associated with inefficient work design and lack of teamwork. However, as the simulation progressed, they also experienced the excitement that comes from working as a team to achieve extraordinary levels of improvement. Following the exercise, discussion focused on the role that strong organizational values play in fostering high performance.

"The conference was refreshing," said Amanda Goodson, the director of Marshall's Safety and Mission Assurance Office. "I learned a lot about my peers, and built relationships that I hope will grow in the future."

"The conference was exceptional and provided Center Director Art Stephenson and his direct reports an opportunity to build deeper relationships and focus on integrating the Center's Core Values into our everyday behavior," said Jim Kennedy, director of the Engineering Directorate.



Courtesy photos

Marshall's senior management team participated in the first of a series of leadership conferences being planned.

Mars

Continued from page 1

indicate that a failure to recognize and correct an error in a transfer of information between the Mars Climate Orbiter spacecraft team in Colorado and the mission navigation team in California led to the loss of the spacecraft. The peer review preliminary findings indicate that one team used English units while the other used metric units for a key spacecraft operation.

An internal Laboratory peer group and a special review board consisting of experts from the Laboratory and outside

organizations already have been formed to investigate the loss of the Mars Climate Orbiter.

The support team for the Mars Surveyor 1998 missions continues to analyze all data and engineering processes related to the orbiter's companion mission, the Mars Polar Lander, to ensure that no similar issues exist within that mission. The Mars Polar Lander is scheduled to arrive at Mars on Dec. 3 and land on rolling, icy terrain near the planet's South Pole.

Countdown to Y2K 78 Days Left

Water: Have a three-day supply of water (1 gallon per person per day) stored in sealed, unbreakable containers (soft drink bottles). Children, nursing mothers and ill people will need more.

Courtesy of Information Services Department

Marshall aerospace engineer helping redefine space travel

by Debra Valine

An aerospace engineer at Marshall is working with a team to build a new propulsion system that may take space travel into the new millennium.

Felix Lopez, with the Thermal and Fluid Systems Group of the Engineering Directorate, provides NASA oversight on the Propulsive Small Expendable Deployer System (ProSEDS).

"My team — the Thermal Control Systems Team — does thermal design, analysis, integration and testing of spacecraft, experiments, avionics and other payloads," Lopez said. Some examples of projects his team has worked on include the Chandra X-Ray Observatory, SXI, the Lightning Imaging Sensor, the Next Generation Space Telescope and ProSEDS.

"What I do on ProSEDS is a little different from what I have done in the past," Lopez said. "Basically, I am providing oversight on the project. Sverdrup is doing the thermal design and analysis, and I am overseeing the work that is done by them."

ProSEDS is an experiment involving a conducting tether on board a Delta rocket second stage, Lopez said. "When that stage is discarded, typically it becomes on-orbit debris until it gets pulled back into the atmosphere. Sometimes this takes many months or years.

"With ProSEDS, a conducting tether is



Felix Lopez

deployed," Lopez explained. "It will use the Earth's magnetic field to pull the Delta second stage back into the Earth's atmosphere in a matter of days." Discarded items that remain on orbit create a "space junkyard" that poses hazards to working satellites and operational spacecraft. The Space Shuttle and the Hubble Space Telescope have been hit by debris, Lopez said.

"Marshall also hopes to use the tether as a propulsion source that replaces traditional chemical propulsion," Lopez said. "They hope it will be useful in reboosting future spacecraft such as the International Space Station."

ProSEDS completed its Critical Design

Review last month, and will now proceed into the building and testing stage. It is expected that ProSEDS will launch in August 2000. "The design is pretty much complete," Lopez said. "All that has to be done now is some fine-tuning."

Lopez, who was born in Puerto Rico but raised in New York City, has worked at Marshall for more than a decade. He earned his bachelor's degree in mechanical engineering from the University of Puerto Rico at Mayaguez.

When he's not at Marshall, Lopez spends lots of time with his wife, Damaris, and their children, Stephen, 8, and Tiffany, 4. Any spare time he has is devoted to his painting and reading hobbies. Lopez paints mostly portraits in oil or watercolor and likes reading classical and art books, poetry and literature by authors such as Oscar Wilde and Ernest Hemingway.

"I've done some portraits of co-workers who have retired or left our group," Lopez said. "Art is my main love. I have always wanted to be an illustrator, but right now I cannot because of family and work obligations."

In addition to working at Marshall, Lopez works a couple of nights a week at a local bookstore. "I love reading books, and this way I'm surrounded by them, and also get a good discount."

The writer, a contractor employed by ASRI, is the Marshall Star editor.

Boeing – Phantom Works Technology Exposition & Exchange

The Boeing Company's advanced research and development unit — Phantom Works — will conduct a technology exposition from 9 a.m.-4 p.m., Oct. 20-21 at Hangar 4832, Redstone Army Airfield.

The exposition at Redstone Army Airfield is open to all active duty U.S. government personnel of U.S. citizenship. A valid U.S. government identification badge, either military or civilian, will be required due to the proprietary nature of the information on display.

The exposition will present technologies, processes and advanced systems developed by the Phantom Works, and will address acquisition reform, lean manufacturing, affordability, supportability and sustainment initiatives that can improve the

life-cycle value of existing and future products.

Other highlights of the exposition include: 3-D modeling and simulation processes, structures and vehicle configuration technologies, advanced prototyping techniques and advanced systems such as hypersonic/space transportation vehicles, blended wing-body aircraft and a canard rotor/wing concept. Boeing technical managers also will present display boards, literature, demonstrations and models.

The government/Boeing "Technology Exposition and Exchange" was conceived almost 10 years ago to better communicate the company's technology initiatives and results to customers, and to get direct feedback on the direction Boeing is taking.

Nominees sought for position on NASA Exchange Council

A special nominating committee is accepting names of nominees from employees for an election to fill one position on NASA's Marshall Exchange Council.

Names will be accepted by the committee when accompanied by a petition signed by 20 or more employees. Deadline for submitting nominations is close of business, Oct. 20. Anyone can make a nomination. There is no requirement that nominees and petitioners be from the same organization. Petitions must bear the signature of the nominee indicating a willingness to serve, if elected. Petitioners must provide their Marshall badge number in addition to their signature. Mail petitions to Exchange Council Election, CD10X, Bldg. 4752.

Each candidate must have served as a Marshall civil service employee for at least a year, and the term of office is two years. No Marshall employee may serve concurrently as a member of the Council and as an officer of any Exchange-sponsored club or activity. The new Council member will take office in the new year. A list of nominees will be printed in the Nov. 4 issue of the Marshall Star. Voting instructions and ballots will be mailed to all employees.

Bldg. 4752 being renovated

Portions of Bldg. 4752 will be closed during renovations that began Wednesday. The business office of the NASA Exchange has relocated to room 109. The office is in a secure area, so visitors must phone or e-mail to gain access. The retail store and ticket sales office will be closed and aerobic exercise classes will not be held until renovations are complete in late November.

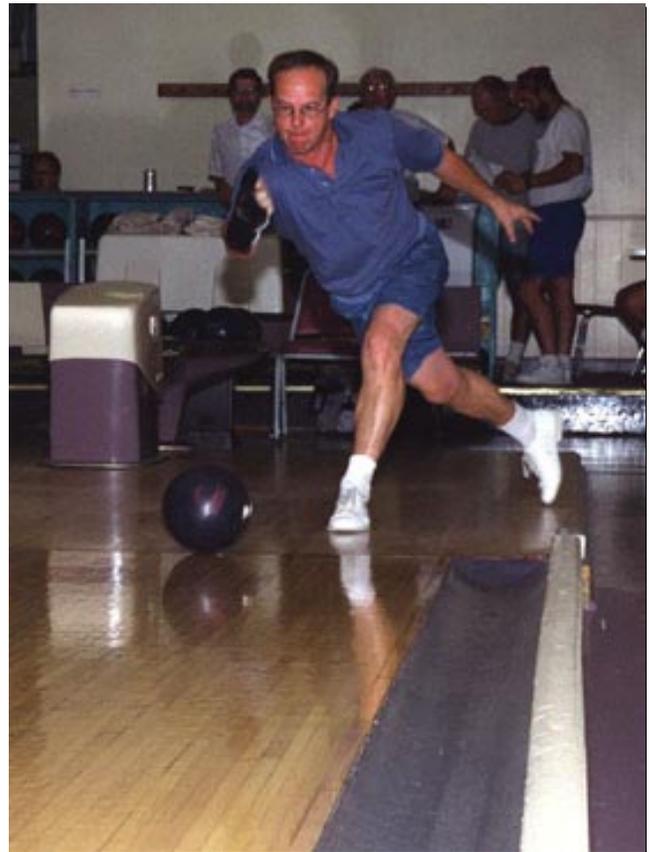


Photo by William Rainey, NASA/Marshall Space Flight Center

You're all going down

Terry Whaley of the Systems and Processes Office in the Office of the Chief Financial Officer bowls in the NASA Men's League on Tuesday nights at Monarch Lanes Bowling Alley in Huntsville. Whaley, with a 195 average, bowls with the Valley Insurance-sponsored team, one of seven teams in the league this year. His high-game series this year is 685, which he bowled Oct. 12.

Fitness Center offers courses on understanding back and neck pain

The Marshall Physical Exercise Program will come to work areas and provide the following courses to civil service or on-site contractor employees.

Since back and neck health are often suggested as safety topics to include in monthly safety meetings, consider making these courses part of your meeting.

'Healthy Back for Life'

Many people think that lifting is how a back gets hurt. While that may be true in some cases, it is now known that sitting slumped and standing stooped are just as stressful for the back as lifting. In this class, participants will learn why back problems are so common, examine the principles of proper posture and the ways

that one can often prevent back problems through knowledge of proper body mechanics. Participants will be taught the "power" position for the back when sitting, standing, lifting or even swinging a golf club. They will be introduced to simple exercises that can be done to maintain the proper strength and flexibility necessary to live an active, productive life. Participants will receive a manual which will reinforce the information and techniques taught in class. *Class Length:* 1 hour

'For Your Neck'

Most neck problems are unnecessary and can be avoided. While

medical intervention is sometimes required, research shows that what you do on your own is usually more significant than what the medical professional can do. Most neck problems are the result of bad posture, faulty body mechanics, stressful living, poor working habits and a decline in one's level of physical fitness. The good news is that most neck problems can be managed effectively which is demonstrated in the manual, "FOR YOUR NECK," that participants who take this course will receive. *Class Length:* 1 hour

Just call Mike Clark at 544-3337, or Pat Mirandy at 544-7570, to schedule a time for this educational experience. They are available weekdays from 5 a.m.-3 p.m.

Employee Ads

Miscellaneous

- ★ Truck bedliner, 97-00 Ford F150, short bed, \$125. 534-7791
- ★ Antique solid oak dining table, 46" x52", \$175. 883-6416
- ★ Leather jacket, women's size 11-12, brown, zip front, side pockets, Thermolite lining, \$95. 722-9719
- ★ Sailboat, Capri 14.2 with galvanized trailer, includes mainsail and roller furling jib, \$3,995. 830-2903
- ★ Levelor curtain rods, \$4 each; hand operated auto grease gun, lithium cartridge, \$4. 881-8648
- ★ Pyramid stereo graphic equalizer, \$50; Akai stereo receiver. 722-0417
- ★ Dry firewood, oak/hickory, you haul, \$35 per pick-up truck load. 880-2290
- ★ Bicycle trailer, Burley Lite, seats two children, screen bug cover, \$125 obo. 721-9005
- ★ Mobile home windows, seven 32x55 1/2, \$15; two 32x28 1/2, \$9 obo. 461-8396
- ★ Chipper/shredder, 5 HP B&S, leaf vacuum on wheels, all components, \$100. 379-3606
- ★ Huntsville Channel Cats hockey season tickets. \$375 for two. 430-0985 after 5 p.m.
- ★ Larson 1 1/4" thick, 36" full view brown storm door, brass handle with keylock, \$135. 883-8257
- ★ Desk, "This End Up," 3-drawer, with hutch, lamp and cork board, \$200. 534-7981
- ★ Exercise equipment: freeweights, hydraulic piston and leverage multi-station machines, treadmill, NordicTrac. 725-7549
- ★ Home theater/computer front projector, PC and MAC compatible, worm tubes, need replacements, \$800. 776-4175
- ★ Sears Lifestyler treadmill, \$150; camel back mauve queen size sleeper sofa, \$175. 586-2852
- ★ Hoyt USA Rebel youth bow, 35-50 draw weight, 24" draw length, includes sights/arrow rest, \$175. 883-6416
- ★ 12" Professional tile cutter with 1/2-inch carbide cutter, \$13. 461-8369

Vehicles

- ★ 1999 Toyota 4-Runner SR5 4x4, 14K miles, hood scoop, CD/cass., moonroof, \$31,000 obo. 753-2187
- ★ 1997 Geo Metro Lsi hatchback, 4-cyl, auto, 30K miles, \$3,500. (205) 429-3805 after 5 p.m.

- ★ 1994 Nissan Sentra LE, 4-door, 4-cyl., automatic, a/c, power windows/locks, \$5,500. 880-7381
- ★ 1988 Jeep Wrangler, hard top, air, ps/pb, cassette, maroon/tan, \$7,500 obo. 882-2645
- ★ 1995 Chrysler New Yorker, all power, 70K, maroon, gray interior, \$6,900. 880-9025
- ★ 1991 Buick Park Avenue, 4-door, tan, 159K miles, leather, pw/ps, air, cruise, \$4,200. 881-8953
- ★ 1995, Ford Taurus, GL, all options, \$5,750; 1990 Dodge D50, 5-speed, \$1,950. 776-4726
- ★ 1992 Nissan 240SX hatchback, red, new tires, 5-speed, CD, security system, \$9,200. 883-6416
- ★ 1998 Ford Expedition Eddie Bauer, 4x2, loaded, 10K miles, \$27,200. 753-2595

Wanted

- ★ Child's high-back booster car seat for 40-60 lb. child. 881-0551
- ★ Female roommate to share 1999 3BR/2BA manufactured home near Jetplex, NW Huntsville, w/UAH student, \$250. 772-9500

Found

- ★ Set of keys on Harley-Davidson key ring in 4200, executive parking lot. 544-3389.
- ★ "Fubu League" sports shirt left on NASA bus. 544-8294

Free

- ★ Shrubs, 23 dwarf Helli hollies, you dig. 881-0278
- ★ National Geographic and Popular Science magazine collection. 883-2653
- ★ Very prolific goldfish from backyard pond. Different sizes and markings. Will deliver. 351-0869 after 6 p.m.

Center Announcements

- ☛ **Government Accountants Meet** — The North Alabama Chapter of the Association of Government Accountants will hold its monthly meeting on Oct. 21 at Landry's Seafood Restaurant. The meeting begins at 10:45 a.m. with lunch at 11 a.m. and speaker Mo Brooks at 11:30 a.m. Cost is \$11. For reservations, call Sandra Seymour at 544-0099.
- ☛ **MARS Tennis Tournament** — The MARS Tennis Club is holding a Closed Hi-Lo Doubles Tournament on Oct. 23. The tournament starts at 8:30 a.m., with check-in and warm up at 8 a.m.

- To participate, call Ronda Moyers at 544-6809.
- ☛ **NARFE Meets** — The National Association of Retired Federal Employees (NARFE) will meet Saturday at the Senior Center on Drake Avenue. Guy Jones will discuss changes in the Blue Cross and Medicare programs for the year 2000. Refreshments at 9:30 a.m. Program starts at 10 a.m. For more information, call 837-0382 or 881-3168.
- ☛ **Shuttle Buddies Breakfast** — The Shuttle Buddies will meet for breakfast at 9 a.m. Oct. 25 at Mullins Restaurant on Andrew Jackson Way. For more information, call Deemer Self at 881-7757 or Gail Wynn at 852-8189.
- ☛ **MESA Meeting** — The Marshall Engineers and Scientists Association (MESA) will meet Oct. 21 at 11:30 a.m. in Bldg. 4471, room C-105.
- ☛ **Cultural Diversity Leadership Program** — Cultural diversity leadership training will be held Nov. 3-4 from 8 a.m.-4 p.m. at the University of Alabama in Huntsville's Wilson Hall, room 104. This training program is to educate employees about the importance of creating and maintaining an environment where everyone has the opportunity, tools and support to work to their full potential while accomplishing the organization's mission. Employees should enroll via AdminSTAR. The cutoff for enrolling in this session is Oct. 19.
- ☛ **October Blood Drive** — The American Red Cross will be conducting the monthly blood drive Friday in the North Loop of Bldg. 4203 at Marshall. The schedule is as follows: A-B, 8 a.m.; C-F, 8:30 a.m.; G-H, 9 a.m.; I-L, 9:30 a.m.; M-O, 10 a.m.; P-S, 10:30 a.m.; and T-Z, 11 a.m. Since there will be one bus, only 50-60 donors will be accommodated. The Sparkman Center, Bldg. 5309, room 9128, Redstone Arsenal, will hold a blood drive on Thursday. Any Marshall employees who want to donate blood at the Sparkman Center can call Betty Mountain at 313-1779 for an appointment.
- ☛ **Amnesty Day** — Turn in hazardous materials with no questions asked on Oct. 19 from 9 a.m.-2 p.m. on the South side of Bldg. 4705. For more information, call Lynn Hereford at 544-4931.

Space Transportation Day is Oct. 27 at the Von Braun Center. Marshall employees and contractors may pick up tickets from admin officers. Employees planning to attend must register online by Oct. 18 at: STDay.msfc.nasa.gov

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